

North American PHEV Demonstration

Fleet Summary Report: Hymotion Prius (V2Green data logger)

Number of vehicles: 184

Reporting Period: Apr 08 - July 2011

Vehicle Technologies Program

Date range of data received:

4/18/2008 to 7/31/2011

Number of days the vehicles were driven: 1193

All Trips Combined

Overall gasoline fuel economy (mpg)	48
Overall AC electrical energy consumption (AC Wh/mi) ¹	52
Overall DC electrical energy consumption (DC Wh/mi) ²	38
Total number of trips	299,862
Total distance traveled (mi)	2,801,591

Trips in Charge Depleting (CD) mode ³

Gasoline fuel economy (mpg)	62
DC electrical energy consumption (DC Wh/mi) ⁴	142
Number of trips	121,243
Percent of trips city / highway	87% / 13%
Distance traveled (mi)	554,300
Percent of total distance traveled	20%

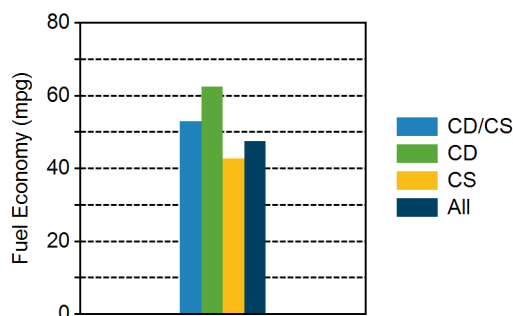
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes ⁵

Gasoline fuel economy (mpg)	53
DC electrical energy consumption (DC Wh/mi) ⁶	49
Number of trips	21,516
Percent of trips city / highway	47% / 53%
Distance traveled (mi)	561,574
Percent of total distance traveled	20%

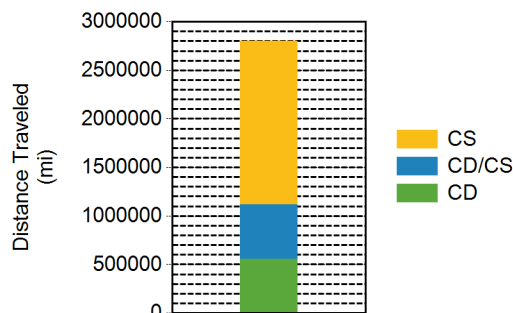
Trips in Charge Sustaining (CS) mode ⁷

Gasoline fuel economy (mpg)	43
Number of trips	157,094
Percent of trips city / highway	77% / 23%
Distance traveled (mi)	1,689,146
Percent of total distance traveled	60%
Number of trips when the plug-in battery pack was turned off by the vehicle operator ⁸	13358
Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) ⁹	288,574

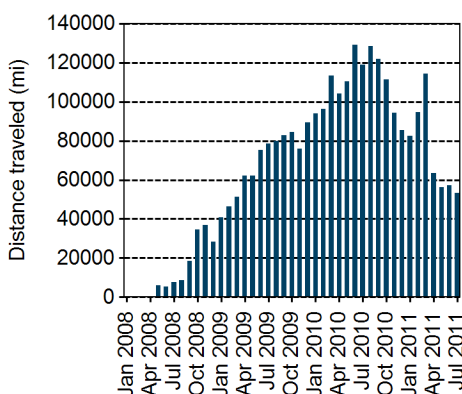
Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



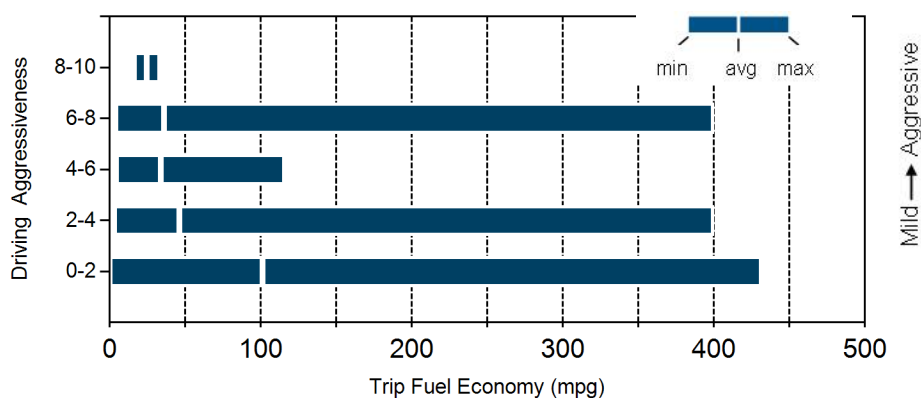
Miles Logged by Month This Year



Notes: 1 - 9. Please see <http://avt.inl.gov/pdf/phev/ReportNotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

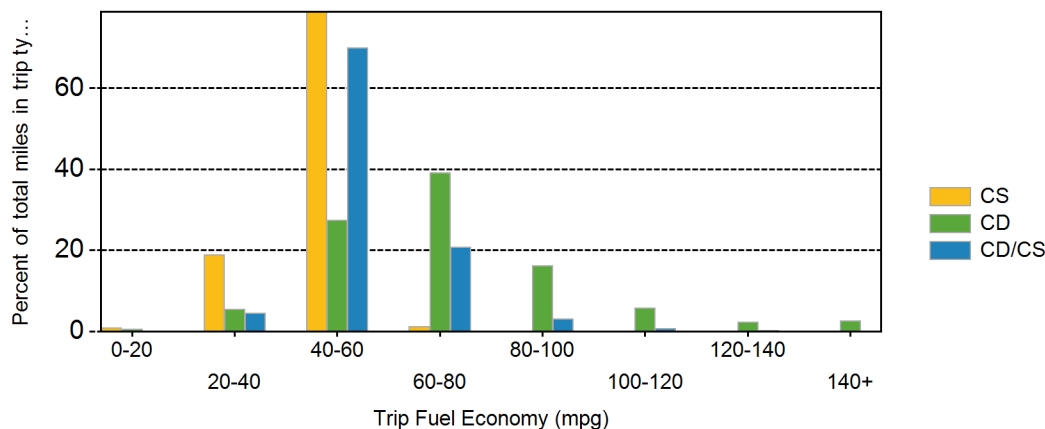
Trips in Charge Depleting (CD) mode		City	Highway
Gasoline fuel economy (mpg)		60	66
DC electrical energy consumption (DC Wh/mi)		165	109
Percent of miles with internal combustion engine off		32%	15%
Average trip aggressiveness (on scale 0 - 10)		1.8	1.8
Average trip distance (mi)		3.0	15.0
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes			
Gasoline fuel economy (mpg)		53	53
DC electrical energy consumption (DC Wh/mi)		79	44
Percent of miles with internal combustion engine off		27%	9%
Average trip aggressiveness (on scale 0 - 10)		1.9	1.6
Average trip distance (mi)		8.7	41.6
Trips in Charge Sustaining (CS) mode			
Gasoline fuel economy (mpg)		36	46
Percent of miles with internal combustion engine off		22%	8%
Average trip aggressiveness (on scale 0 - 10)		2.0	1.7
Average trip distance (mi)		3.5	35.3

Effect Of Driving Aggressiveness on Fuel Economy This Year



Aggressiveness factor is based on accelerator pedal position. The more time spent during a trip at higher accelerator pedal position, the higher the trip aggressiveness.

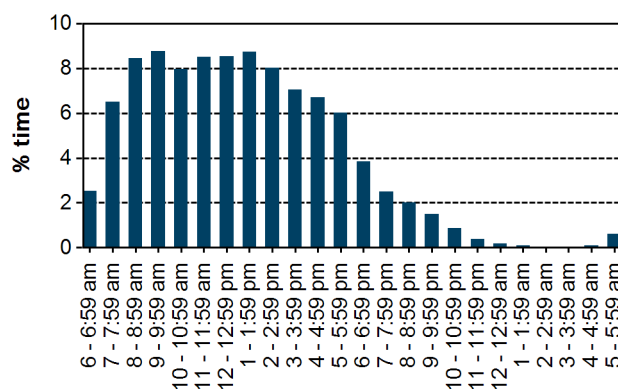
Trip Fuel Economy Distribution By Trip Type



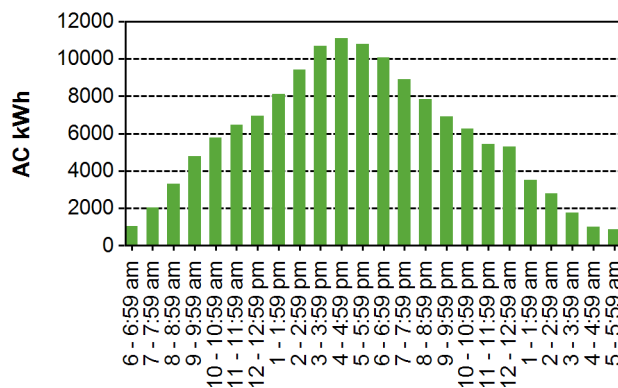
Plug-in charging

Average number of charging events per vehicle per month when driven	13
Average number of charging events per vehicle per day when vehicle driven	0.9
Average distance driven between charging events (mi)	51.6
Average number of trips between charging events	5.5
Average time plugged in per charging event (hr)	24.2
Average time charging per charging event (hr)	2.8
Average energy per charging event (AC kWh)	2.7
Average charging energy per vehicle per month (AC kWh)	34.5
Total number of charging events	54,307
Total charging energy (AC kWh)	147,024

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In

